Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1-11. (Canceled)

12. (Currently Amended) A voltage conversion device variably changing an input voltage to be applied to an inverter driving a motor, comprising:

a voltage converter executing voltage conversion between a power supply and said inverter; and

a control device controlling a switching duty of an upper arm and a lower arm included in said voltage converter so that an influence of a dead time of said voltage converter is removed, when a voltage command value of said voltage conversion is at least a power supply voltage and at most a predetermined voltage, wherein

said predetermined voltage is a minimum voltage that can secure the dead time of said voltage ~~converter, and~~ converter and is determined based on the dead time, the power supply voltage and a control period length, and

said control device controls said voltage converter by fixing said switching duty when said voltage command value is at least said power supply voltage and at most said predetermined voltage.

13. (Previously Presented) A voltage conversion device variably changing an input voltage to be applied to an inverter driving a motor, comprising:

a voltage converter executing voltage conversion between a power supply and said inverter; and

a control device controlling a switching duty of an upper arm and a lower arm included in said voltage converter so that an influence of a dead time of said voltage converter

is removed, when a voltage command value of said voltage conversion is at least a power supply voltage and at most a predetermined voltage, wherein

said predetermined voltage is a product of the power supply voltage and a control period length, divided by an effective control period length, the effective control period length being determined by subtracting the dead time from the control period length, and

said control device controls said voltage converter by fixing said switching duty when said voltage command value is at least said power supply voltage and at most said predetermined voltage.

14. (Canceled)

15. (Previously Presented) A voltage conversion device variably changing an input voltage to be applied to an inverter driving a motor, comprising:

a voltage converter executing voltage conversion between a power supply and said inverter; and

a control device controlling a switching duty of an upper arm and a lower arm included in said voltage converter so that an influence of a dead time of said voltage converter is removed, when a voltage command value of said voltage conversion is at least a power supply voltage and at most a predetermined voltage, wherein

said predetermined voltage is a product of the power supply voltage and a control period length, divided by an effective control period length, the effective control period length being determined by subtracting the dead time from the control period length, and

when said control device controls said voltage converter to decrease an output voltage of said voltage converter, said control device fixes said switching duty when said

voltage command value reaches a value of at least said power supply voltage and at most said predetermined voltage.

16. (Previously Presented) The voltage conversion device according to claim 12, wherein

said voltage converter linearly changes said input voltage.

17. (Previously Presented) A voltage conversion device variably changing an input voltage to be applied to an inverter driving a motor, comprising:

a voltage converter including an upper arm turned on for a first on-duty and a lower arm turned on for a second on-duty determined by subtracting said first on-duty from 1, and executing voltage conversion between a power supply and said inverter by switching said upper arm and said lower arm; and

a control device controlling said first on-duty to remove an influence of a dead time when said first on-duty calculated based on a voltage command value of the voltage conversion by said voltage converter is influenced by said dead time of said upper arm and said lower arm, wherein

said control device controls switching of said upper arm and said lower arm by fixing said first on-duty at said appropriate on-duty, when said first on-duty calculated based on said voltage command value is larger than a maximum effective on-duty and smaller than a longest on-duty allowing said upper arm to be turned on continuously during a control period, and

said maximum effective on-duty is determined by dividing an effective control period, calculated by subtracting said dead time from said control period, by said control period.

18. (Previously Presented) The voltage conversion device according to claim 17, wherein

said control device controls switching of said upper arm and said lower arm by fixing said first on-duty when said first on-duty calculated based on said voltage command value is influenced by said dead time.

19. (Canceled)

20. (Previously Presented) The voltage conversion device according to claim 17, wherein

said appropriate on-duty is said maximum effective on-duty or said longest on-duty.

21. (Previously Presented) The voltage conversion device according to claim 17, wherein

said voltage converter linearly changes said input voltage.

22. (Previously Presented) A computer-readable recording medium having a program recorded thereon for a computer to control voltage conversion by a voltage conversion device,

said voltage conversion device including a voltage converter having an upper arm turned on for a first on-duty and a lower arm turned on for a second on-duty determined by subtracting said first on-duty from 1, and executing voltage conversion between a power supply and an inverter by switching said upper arm and said lower arm, and

said program allowing said computer to execute:

a first step of calculating said first on-duty based on a voltage command value of said voltage conversion;

a second step of determining whether said calculated first on-duty is influenced by a dead time of said upper arm and said lower arm;

a first sub-step of calculating a maximum effective on-duty by using said dead time;

a second sub-step of determining if said calculated first on-duty is larger than said maximum effective on-duty and smaller than a longest on-duty and allowing said upper arm to be turned on continuously during a control period based on said determination;

a third sub-step of determining if said first on-duty is influenced by said dead time, when said first on-duty is larger than said maximum effective on-duty and smaller than said longest on-duty, and

a fourth sub-step of determining if said first on-duty is not influenced by said dead time, when said first on-duty is at most said maximum effective on-duty or equal to said longest on-duty, and

said maximum effective on-duty is determined by dividing an effective control period, calculated by subtracting said dead time from said control period, by said control period, and

a third step of controlling said first on-duty to be an appropriate on-duty when said first on-duty is influenced by said dead time.

23. (Original) The computer-readable recording medium according to claim 22, wherein

in said third step, switching of said upper arm and said lower arm is controlled by fixing said first on-duty at said appropriate on-duty.

24. (Canceled)

25. (Previously Presented) The computer-readable recording medium according to claim 22, wherein

in said third step, switching of said upper arm and said lower arm is controlled by fixing said first on-duty at said maximum effective on-duty or said longest on-duty.

26. (Canceled)

27. (Original) The voltage conversion device according to claim 13, wherein

in a case where said control device controls said voltage converter to decrease an output voltage of said voltage converter, said control device fixes said switching duty when said voltage command value reaches a value of at least said power supply voltage and at most said predetermined voltage.

28. (Previously Presented) The voltage conversion device according to claim 13, wherein

said voltage converter linearly changes said input voltage.

29. (Canceled)

30. (Previously Presented) The voltage conversion device according to claim 18, wherein

said voltage converter linearly changes said input voltage.

31. (Canceled)